

CARTELS

Challenge to a Free World

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To My Father

GEORGE W. BERGE

*who throughout his life and in his public career was
guided by the conviction that the people's rights
are not won without struggle and will not
be maintained without vigilance.*

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M. B. Schnapper, Executive Secretary and Editor

Preface

Plastics, television, new chemical and electrical techniques are but a few of the instruments which will furnish the stuff for the pioneers of a new age. The challenge of housing will excite bold minds to action, on a scale never before attempted. Pipe out slums and give dwellers in country and city alike a new and higher standard of living. Not only at home, but also abroad, the opportunities for daring enterprise which will be offered by the needs of world reconstruction will surpass anything ever before known.

How are we going to meet this challenge? At the outset, we must face frankly the greatest obstacle to making the most of our opportunity. It is the threat of cartel control of major world industries. Unless this threat is understood and dealt with decisively, our opportunity to realize the great potential benefits of a free economy will be lost. And worse still, the hope of maintaining democratic political institutions will be seriously impaired.

The pattern of cartel operations has been clearly revealed in recent years by antitrust investigations. From public records in antitrust proceedings and congressional hearings, information about cartel operations is now available. The public should be familiar with the facts. As head of the Antitrust Division of

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At the Department of Justice, I have frequently been called upon to discuss cartel problems before congressional committees, trade associations and civic groups. Since my testimony and speeches received varying degrees of public notice at the time they were given, the casual reader of newspaper reports necessarily obtained only an impressionistic picture of the far-flung ramifications of the subject. Something more is needed for thorough understanding.

With this thought in mind, a number of friends and associates have suggested from time to time that my material should be woven together in book form. This I have undertaken to do in the present volume.

Merely to make assertions about the evil effect of cartels is a simple matter. But I believe that the real usefulness of this book will depend upon its fairly detailed explanation of the operation of particular cartels, with direct quotations from letters, memoranda and other documents.

While I have not tried to compile a complete source-book, I have striven to make this discussion as non-technical as possible. The factual material is drawn largely from the documents of the Kilgore, Truman and Bone Senate Committees, and from the public records of antitrust cases.

The investigations which unearthed the facts cited in this book were, of course, the work of a great many men and women in the Antitrust Division extending over a period of years. Acknowledgment of credit to all of them would be impossible. Many of the men who have developed these facts are now serving their country in the armed forces.

I cannot praise too highly the ability, energy and devotion to public service of the men and women of the Antitrust Division. It is a privilege to head such a splendid staff, as it is to serve under such an able and distinguished Attorney General as

PREFACE

Francis Biddle, who has maintained at all times an extremely deep interest in our cartel work and has given it his fullest support. Attorney General Biddle has repeatedly impressed upon me his own conviction that the vigorous enforcement of the antitrust laws against cartels is an indispensable condition to the maintenance of a free competitive economy in this country.

In the preparation of this book I am particularly indebted to Joseph Borkin of my staff, who is in my opinion one of the best informed men in America on the activities of international cartels. For more than five years Mr. Borkin has devoted his great resourcefulness and energy to investigation and study of cartel problems. His contribution in this field has been invaluable.

I also want to acknowledge my deep obligation to my First Assistant, Edward H. Levi, with whom I have spent many hours discussing the legal and economic problems of cartels, and on whom I have relied so heavily in the practical administration of the Antitrust Division. And I am greatly indebted to Myron W. Watkins, Charles A. Welsh, Ernest S. Meyers, George P. Comer, Herbert A. Berman, Bartholomew Diggins, Robert Hunter, and Heinrich Kronstein of the Antitrust Division staff, all of whom have been of great assistance in the preparation of this book and in the cartel work of the Division. Professor Walton Hamilton of Yale, who has been a part-time member of the staff, has also worked closely with me on these matters and has made a signal contribution to our work.

Mr. M. B. Schnapper, Executive Secretary of the American Council of Public Affairs, has been of greatest assistance in the planning of this book and in the editorial work which it has involved.

WENDELL BERGE

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1

Trusts to Cartels

The problem of monopoly is no longer a distinctively domestic and national phenomenon. It has come to encompass the wide world. Like a parasite upon its host, monopoly has grown with the marketplace. Today hardly a corner of the world remains free from the malignant influence of its latest and most sinister form, the cartel. Diamonds discovered in Arkansas may prompt agitated conferences within 48 hours in London and the Belgian Congo; a lawsuit in New York challenging the aluminum monopoly brings simultaneous outbursts of oratory in the House of Lords and of vituperation on the Axis radio.

For over half a century, the Sherman Act has stood as a positive expression of the inflexible will of the American people to preserve freedom of economic opportunity. When this measure was enacted the oil, whiskey, and sugar trusts had placed barriers directly athwart the arteries of commerce and were exacting tolls for every gallon or pound of product permitted to pass. Since nation-wide industrial monopoly of a comparatively stable character first took the form of a simple trust agreement the Sherman Act came to be designated an anti-trust statute. But its thrust was positive: the maintenance of

free, competitive markets and a democratic system of industrial control.

If such an Act were passed today, I am quite sure it would be called an "Anti-Cartel Act." For our attention is at the present time focused on industrial monopoly in a different form, operating in a wider orbit. But our basic concern is the same. We are as determined today as were our grandfathers, two generations ago—indeed, as were the founders of the republic—to countenance no infringement of the right to engage in any legitimate enterprise and to conduct business without let or hindrance from any self-constituted group presuming to monopolize trade or industry.

The Sherman Act has proved an effective instrument no less for dealing with the cartel problem than for curbing the trusts. It must be conceded, however, that, in default of proper implementation and appropriate supplementation, it has not fully realized the salutary object for which it was designed. In particular, our policies with regard to patents, trademarks, the tariff, monetary and credit matters, interstate commerce, and foreign trade, all have a direct bearing upon competition and the pattern of industrial organization. They are important factors conditioning the efficacy of a free market for performing its basic economic functions. To our comparative neglect of the incidence of these policies on the problem of maintaining healthful competitive conditions in industry must be attributed a large share of the responsibility for the difference between anti-trust goal and business practice.

In these circumstances, cartels—which, in effect, are trusts magnified to an international scale—have been able by clandestine means to impress their sinister mark upon our economy. In mobilizing for war, we discovered, almost too late, that they were responsible for shortage after shortage of vital materials.

The fact is that they have retarded technological advance and the introduction of improved devices and products, whenever such developments seemed to threaten their vested interests despite the fact that thereby national security might be jeopardized. They have, indeed, obstructed and in no small measure thwarted the declared foreign policies of the American government, placing their own business interests above the public interests.

In peace time, their high-price, restricted-output strategy has impeded the advance of our living standards and general economic well-being. Through the abuse of our patent system, cartel controls have been established over large segments of technology. With this leverage, industrial monopolies of international compass have at times deliberately brought about the deterioration of quality standards. When it might be to their advantage in maintaining or exploiting their monopoly position, they have adulterated their products to an extent and in a manner endangering the health, and even the lives, of consumers. Almost incredible as these assertions may be, they are not subject to contradiction—the incontrovertible facts are clearly set forth in Congressional investigations and in the evidence in antitrust cases of the Department of Justice.

Cartels are in essence private governments which threaten to subvert and even engulf duly constituted authority. In Germany, Kaiserism and later Nazism received enormous impetus, indeed decisive support, from the regimented, cartelized structure of the national economy.

Totalitarianism represents simply the ultimate consummation of cartelism—the final, full expression of the reactionary forces stemming from special privilege. In totalitarian states all industrial enterprise is subservient to the predatory interests and fear-dominated will of a government which openly flouts the

democratic principle of consent of the governed. In the economic sphere, the investment of fresh capital, the volume of production, the prices to be charged, the markets to be served, are determined by arbitrary decrees. Risk-taking, managerial discretion, bargaining freedom, the essential elements of the capitalistic system as we have known it, are absent. One can neither start a new industry, launch a new enterprise, or change one's occupation without first obtaining official consent. It is in the nature of cartels that they should operate in a similar fashion, even if in their application the devices used for consolidating the vested interests of established concerns and throttling the dynamic forces which economic freedom would release may lack something of the rigor they exhibit under totalitarian "leadership." In order to maintain their control over production and prices cartels must determine who may enter the industry, how they shall operate and where they may sell.

The basic American concept of free enterprise is the antithesis of a cartelized market. Yet, all too frequently, some of our industrialists have had the effrontery to attempt to promote a pro-cartel policy by a specious appeal for free enterprise. The pretension is that freedom to compete in trade must encompass freedom to suppress competition! As though the right to start a fire in order to heat a house must include the right to burn down the house in complete disregard of the peril to the whole community! *The common sense of ordinary men has no difficulty in distinguishing between the right to start a fire and the "right" to commit arson.*

Unless I am greatly mistaken, the American public will no more tolerate a cartel-sanctioning abrogation of the antitrust laws in the name of "free enterprise" than they would countenance a repeal of the laws against arson in the name of "freedom of self-preservation"—the right to keep warm!

It is significant, and deserves thoughtful reflection that Germany, the "classic land of the cartel," where regimented economic restrictionism is the accepted "way of life," has in the course of two generations farrowed Kaiserism and Hitlerism—the natural offspring of militarism and cartelism. Even in times of peace, the militarists and industrial monopolists of Germany found cartel restrictions an excellent means for conducting covert warfare. In this way industrial "colonies" were acquired and prospective victims "softened up." Back in 1883, Joseph Chamberlain, as a member of the British Cabinet, declared, in sponsoring a bill designed to forefend the sub-rosa "invasion" tactics of imperialistic Germany:

"It has been pointed out especially in an interesting memorial presented on behalf of the chemical industry that under the present law it would have been possible, for instance, for the German inventor of the hot blast furnace, if he had chosen to refuse a license in England, to have destroyed almost the whole iron industry of this country and to carry the business bodily over to Germany. Although that did not happen in the case of the hot blast industry, it had actually happened in the manufacture of artificial colors connected with the coal products, and the whole of that had gone to Germany because the patentees would not grant a license in this country."

A quarter century later, Lloyd George, introducing a more drastic bill for curbing these insidious depredations on strategically vital British industries, pointed out:

"Big foreign syndicates have one very effective way of destroying British industry. They first of all apply for patents on a very considerable scale. They suggest every possible combination, for instance, in chemicals, which human ingenuity can possibly think of. These combinations the syndicates have not tried themselves. They are not in operation, say, in Germany or

elsewhere. . . . A good many of these patents have been taken out not for the purpose of working the patents in this country, *but for the purpose of preventing their being worked.*"

The "big foreign syndicates" to which George referred were, of course, the German cartels.

The adroit strategy of stealthily sapping the industrial foundations of the national security of countries capable of resisting the German *drang nach* all-points-of-the-compass has been relentlessly pursued and resourcefully developed, through thick and thin, decade after decade. If the cartels are thwarted in the use of the patent system as a weapon for disarming potential competitors abroad, they may inveigle the intended victims of German aggression to a 'simulated' love-feast at which the latter are gorged with the poisoned food of production quotas, technology restrictions, market-territory limitations, and pricing inhibitions. What these tactics accomplished in the way of immobilizing French industry is now a familiar story. To cite the record of only three of the most strategic industries, through cartel manipulations the Germans succeeded in (a) reducing the relative output of French steel from substantial equality with German output in 1926 to 40 percent thereof in 1938, (b) retarding the growth of French aluminum production to a rate which fell short of doubling the output in the same period, while German production was increasing five-fold, and (c) restricting the French dyestuffs industry in such fashion that its output in 1937 was barely two-thirds of what it had been in 1924, whereas German production, even according to official estimates (none too reliable though they are) had increased five percent in the same period.

Nor were the European countries alone the "potential enemies" whose vital economic defenses were thus impaired by subtly imposed cartel restrictions. In this hemisphere, likewise

and not least of all in our own country, the cartel device was sedulously—and effectively—used for the same ulterior purpose. As President Woodrow Wilson declared shortly after the first World War,

“Our complete dependence upon German [dyestuffs] supplies before the war made the interruption of trade a cause of exceptional economic disturbance. The close relation between the manufacture of dyestuffs on the one hand and of explosives and poisonous gases on the other, moreover, has given the industry an exceptional significance. . . It will . . . be a policy of obvious prudence to make certain of the successful maintenance of many strong and well-equipped chemical plants. German chemical industry, with which we will be brought into competition, was and may well be again *a thoroughly knit monopoly, capable of exercising a competition of a peculiarly insidious and dangerous kind.*”

Despite this warning in 1919, we were only slightly better off, relatively, in respect of the arts of organic chemicals manufacture twenty years later, when Germany decided the time was ripe for another attempt at world conquest, than we had been in 1917. In the matter of synthetic rubber technique, today the most strategically critical of all these processes, I. G. Farbenindustrie had succeeded, through its cartel arrangements with the leading American firms in the petroleum and chemical fields, in keeping this country in an extremely vulnerable position—as all the world now knows. Partly through persistent stalling tactics, partly through playing one American firm off against another, partly through cajolery, and partly through deliberate deceit, the German cartelists had not only stifled the development of American technology in this field, even by their “partners” on this side of the Atlantic, but had done even better, from their standpoint. They had obtained the German

patent rights and the essential know-how for the most signal contributions of American technicians to the art of synthetic rubber manufacture. And, incredible though it may seem, they had obtained these advantages without divulging a single significant detail of their own carefully guarded know-how!

As the President's Office of Facts and Figures ruefully summed up the situation in 1942:

"[The enemy] has worked for many years to weaken our military potential. Through patent controls and cartel agreements he succeeded in limiting American production and export of many vital materials. He kept the prices of these materials up and the output down. He was waging war, and he did his work well, decoying important American companies into agreements, the purpose of which they did not sense."

Thus, sixty years after a member of the British Cabinet first testified to its awareness of the menace in the insidious penetration of German cartels in the international sphere, a branch of the American Executive confirms the continuing pertinence of his observations.

How, in the face of this record, in the light of this evidence of the persistence of the cartel movement and of its chronic tendency to pervert the processes of industrial production to ulterior ends leading indefeasibly to the devastation and slaughter of war can it be contended that cartels represent a promising way to order the post-war world economy? Is it not plain, rather, that "if we would guide by the light of reason," we must reaffirm our pledge of democratic equality of opportunity for all in trade and industry, and resolutely set about the task of putting our house in order in accordance with that basic principle of American life? Is it not plain, too, that monopolistic industrial control in the domestic sphere cannot be completely achieved without the uprooting of the foci of cartel infection in

German industry? Once German industry is purged of its cartel hook-ups and monopolistic animus and all non-German industry is released from the haunting fears and seductive temptations which go so far to explain these international industrial alliances, I am confident that the prospects for the restoration of genuine freedom of enterprise and healthy competitive markets will be good. While I am not sanguine of the goal being reached forthwith and easily, "at one bound" as it were, I have an abiding faith that the dynamism of economic freedom will enable us, in the end, to surmount every obstacle erected by special privilege or vested interest on the highroad to full utilization of resources. A truly great adventure is ahead.

2

Enterprise Eclipsed

It is the determination of our people not only to gain victory over the military power of aggressors, but to establish securely the lasting conditions of peace. We know that beyond victory we shall have to face a multitude of perplexing economic problems. We must also realize that we shall meet new dangers to those free institutions on which our national economy is based. If the problems of peace are to be solved, we shall have to come to grips with these difficulties in the same spirit of resolution with which the war has been waged.

It seems abundantly clear that America can never have a foreign policy based on the principles of democracy and international good will as long as international trade is dominated by cartels. It does not seem possible that the Atlantic Charter, the Good Neighbor policy, and the reciprocal trade pacts can effectively prevail if the special privileges of cartels dominate trade and politics in the postwar world.

In many respects cartels form one of the central issues of the present period. The greatest threat to our success in achieving full production and full employment at home, and friendly co-operation with other nations abroad, is the philosophy and practice of privilege embodied in cartels. If there is to be a free and productive economy in the United States, or a free exchange of

goods in world markets, the power of cartels must be broken.

It is essential to understand that cartels seek to divide and rule world industry on the basis of economic privilege. If cartels are successful in gaining a foothold in the postwar period, it will almost be impossible for this nation to maintain a high level of peacetime production or to cooperate in the reconstruction of world trade.

In general, cartels restrict rather than promote trade. Cartels typically engage in such practices as dividing fields of operation and market areas between members so as to eliminate competition, restricting production by agreement, and fixing prices so as to avoid price competition. They also promote various kinds of patent licensing contracts which enable them to control and limit the use of new inventions and thus restrict the benefits of technological advance. The effects of these practices include reduced production and employment, higher prices and profits, retarded spread of technological improvements and a lower standard of living.

The conduct of cartels before and during this war has been one of the tragic pages of our history. The shortages of aluminum and magnesium resulting from cartel restrictions forced us to strip the kitchens of America and scar our public squares with scrap piles. The scarcity of rubber is a never-ceasing threat to our productive effort. Our armed forces plead with us to contribute our binoculars. The lack of vital drugs and medicines has jeopardized our men fighting in fever stricken areas. In fact, almost wherever there was a cartel there was a shortage.

But cartels have an even more serious aspect. These private governments threaten the sovereignty of democratic nations. The political implications of cartel activity threaten to subvert future national public policy of the United States.

There is a close relation between a country's economic policies

and its foreign relations. It is generally recognized now that economic freedom cannot be attained at home if private groups are permitted to acquire monopoly power over industry. Likewise, it must be equally recognized that friendship and cooperation between this country and other nations cannot be established without the free exchange of goods and services. Reciprocal trade treaties and good neighbor policies can have little effect if private cartels can shut off American markets to foreign producers or prevent American producers from selling abroad.

The Good Neighbor policy is one of the fundamental principles of our relations with Latin America. While our Government was bending every effort to bring about the conditions of sound and mutually advantageous cooperation, cartels were systematically undermining these efforts. Latin America was turned over by private cartels as a colony to hostile foreign interests. By giving German industry virtually a free hand in Latin America, and by agreeing not to compete, American cartelists made possible the creation of a German sphere of influence. Nazi propaganda, espionage, and subversive activity all stem directly from this unhampered German penetration. When South Americans sought to purchase drugs, metals, precision equipment, and munitions from the United States, private cartel treaties had already provided that American concerns could not engage in this trade. Not only was the healthy development of South American trade and industry checked, but even today we struggle desperately to overcome the political consequences of cartel activity.

We have long cherished the principle of open covenants openly arrived at. In fact, this policy is an essential part of America's conduct of foreign affairs. Every treaty commitment made by this country is debated publicly by the people's representatives. Without the agreement of two-thirds of the Senate

and the President, no treaty may be made. Yet agreements have been made in international industry affecting both the American economy and our foreign policy which were secretly contrived and clandestinely arrived at. The American people had no voice, but they bore the burden of these private treaties.

Make no mistake—the war has not interfered with cartel plans. Cartel agreements invariably provide for the contingency of war. Long before the war, cartels worked out a *modus vivendi*—a method of continued existence—for they felt that their relations must be preserved, war or no war. Thus we find American and British cartelists agreeing to preserve the German position in Latin American markets after the war. Agreements between the cartel members of countries now at war provide for a resumption at the war's close. In case legislation or government action interfere, then they will cooperate to adapt their relations, as one agreement states, "in the spirit of the present agreements."

Therefore, the necessity for vigorous action in keeping open the channels of trade becomes apparent when we consider that those who create cartels hold themselves above the law or seek to control legislation and Government policy in the many countries where they operate.

These same groups are making their own postwar plans. Because they have found the enforcement of the Sherman Act a hindrance in the past they have expressed a desire to have the antitrust laws repealed.

It should be recalled that the political deal which Munich represented had its economic counterpart in one made at Dusseldorf, in which the Federation of British Industries and the German industrial overlords expressed their intention of stabilizing and rationalizing world trade. As indicated at Dusseldorf, cartel groups regard governments as handy instruments

to be used in working out their schemes of restriction.

Although the peace of Munich has received considerable public consideration, little attention has been given to the peace of Dusseldorf, a peace which, while obscured in the welter of political and military crises, epitomized the spirit and the power of international industrial monopoly.

On March 15 and 16, 1939, immediately after Hitler's invasion of Czechoslovakia, representatives of the Reichsgruppe Industrie of Germany and of the Federation of British Industries held an intensive conference at Dusseldorf. At the conclusion of the conference representatives of German and British industry issued the following joint declaration:

"The Reichsgruppe Industrie and the Federation of British Industries, having concluded a general discussion on Anglo-German trade relations, issue the following agreed statement:

"1. The two organizations welcome the opportunity which these discussions have given of developing still further the friendly relations which have existed between the two bodies for so many years.

.....

"4. The two bodies are agreed that the objective to be attained is that the export of all countries should be conducted in such a way as to ensure a fair return for the producers of those countries. Hence it is agreed that it is essential to replace destructive competition wherever it may be found by constructive cooperation, designed to foster the expansion of world trade, to the mutual benefit of Great Britain, Germany and all other countries.

"5. The two organizations are agreed that it is desirable that individual industries in both countries should endeavor to arrive at industrial agreements which will eliminate destructive competition, wherever occurring, but prices must be fixed at such

a level as not to diminish the buying power of the consumers.

"6. The two organizations realize that agreements upon prices or other factors between Germany and Great Britain are only a step, although a most important step, towards a more ordered system of world trade. They would welcome the participation of other nations in such agreements.

.....

"8. The two organizations realize that in certain cases the advantages of agreements between the industries of two countries or of a group of countries may be nullified by competition from the industry in some other country that refuses to become a party to the agreement. In such circumstances it may be necessary for the organizations to obtain the help of their governments and the two organizations agree to collaborate in seeking that help.

"9. The two organizations agree that it is their objective to ensure that as a result of an agreement between their industries unhealthy competition shall be removed. Their aim is to secure as complete cooperation as possible throughout the industrial structure of their respective countries.

"10. The two organizations have agreed to use their best endeavors to promote and foster negotiations between the individual industries in their respective countries. They are encouraged in this task owing to the fact that a considerable number of agreements between individual German and British industrial groups are already in existence. There is thus available a large body of experience which inspires confidence that an immediate extension of this policy is both practicable and advantageous.

"They are glad to state that approximately a further fifty industrial groups have already signified their willingness in principle to negotiate at an early date.

"They also report with satisfaction that negotiations have already been started and are now taking place between ten industrial groups."

The spirit exemplified in the above declaration is not dead. It is awaiting the moment of peace to step in and resume control of those very industries which are most essential to the rehabilitation of a war-torn world, to the fullest use of our labor and resources.

Surely we must realize now that if the program of Dusseldorf prevails in the postwar world it will produce World War III. Surely we must recognize that we cannot build a free world without a free economy.

The close and constant cooperation of the United Nations after the war is all-important. This cooperation should rest, among other things, on active and healthy international trade. We want to see that trade grow unhampered by private restrictions. In attacking these illegal activities the Government of the United States is aiming at a condition which obstructs healthy international trade and threatens the effectiveness of governmental foreign policies.

To combat the influence of monopoly groups, the United States has two effective weapons: (1) the vigorous enforcement of the Sherman Act, and (2) the power which Congress possesses to investigate and make public the hidden dealings of cartel interests.

It is significant that in Great Britain increasing interest in the purposes and activities of cartels is being manifested—principally as the result of American antitrust investigations which have revealed that British industry, no less than our own industry, has suffered the burden of restrictive practices imposed by cartel arrangements.

Moreover, there has been developing in Canada a substantial

interest in the cartel problem. Thus, the *Ottawa Journal* recently stated editorially that "it is fairly clear to all that cartels, large combinations of industries parcelling out territories among themselves, controlling patents and fixing prices, may be a menace to the general well-being, and what is more vital, a menace to world peace."

And the *Winnipeg Free Press* declared not long ago that "it is gradually dawning upon Britain that rationalization of industry has its dangers. They are discovering that monopolies can and do develop evil practices. . . . Thus there is arising there [in Great Britain] a demand for control of monopolies, the breaking down of cartels and the restoration of competition between the great industrial giants." After pointing out some of the evils that flow from monopoly control, the *Winnipeg Free Press* went on to say: "National monopolies which restrain trade are bad enough of themselves. But when combined with international cartels they are intolerable. The Canadian government should pay particular attention to the antitrust proceedings in the United States. They reveal a most unhealthy state of industrial health and if the economy of this country is to be saved from disaster steps will have to be taken to break up the evil monopolies and their cartels."

It would certainly be in the mutual interest of Great Britain and ourselves if we could take a joint stand against private restrictive arrangements in the postwar world and together seek to stamp them out.

There is ample reason to believe that American exposure of secret cartel practices may have its effect on the public policy of other countries and promote common understanding that certain types of activity should be outlawed in other countries as well as here. But irrespective of the extent to which other governments adopt policies similar to ours, there can be no

doubt that American business can thrive in competition with foreign cartels if it does not enter into cartel restrictions. If freed of cartel shackles, American enterprise should well be able to expand in world markets and render foreign cartel control ineffective. It is doubtful, indeed, whether any major international cartel can effectively control world markets without the participation and cooperation of the American segments of the industry. There is a real question whether foreign cartels can long survive in many industries if American cooperation is not extended to them.

If and when some measure of control and regulation becomes economically necessary on an international scale in a particular industry, a question is presented for governmental action—not for private cartel action. If, for example, in a particular industry it seems necessary to control production in order to avoid waste of a scarce natural resource, the solution of such a problem is properly a responsibility of national or international governmental action. Where control is needed, it must be by public authority. If international restrictive agreements are ever needed, they must be determined upon by governments—not by private cartels.

But the situation where control would be required on an international scale is decidedly the exception. Most foreign trade in the postwar world can be conducted on a competitive basis if we give competition a chance. The period following the war will present an unprecedented challenge to the ingenuity of mankind. Men of brains and imagination should have a chance to rebuild the world, to take risks, to engage in foreign trade and to win in competitive struggle, unhampered by private decrees. The world is not a private hunting preserve which can be divided at will among monopolists who think they have gained squatters' rights.

3

Technology

In the days of Adam Smith it was possible to measure the wealth of nations in terms of mineral resources, possession of fertile lands and control of strategic geographical areas. Today we have a new index to the wealth and security of nations. Technology and applied science have become principal instruments in the maintenance of a high standard of living and for the protection of national interests. In fact, when we speak of the balance of power in the modern world, we must take into account the extent and quality of industrial and technological resources as a dominant factor in national welfare. The horizons which have been opened by applied science and research offer to the world, and to our own nation in particular, new industries, greater opportunities for our youth, higher levels of health and comfort, and the attainment of that genuine social security which comes with all great advancements in human knowledge.

Technology—its direction, its applications, and its enjoyment—is today a primary concern of government. In a system based upon freedom of enterprise, access to technology is the fundamental condition of rapid advancement toward the goals for which our nation is striving. The power that goes with the

development of modern technology has been perverted in totalitarian countries to provide instruments of aggression. Because totalitarian states have regimented science and have made it subservient to imperial ambitions, it has been used to destroy rather than to create. One of the principal problems which the United Nations will encounter in the peace to come will be the prevention of any abuse of new discoveries for the purpose of establishing war machines which can threaten the peace of the world.

The control of vital areas of research by monopolistic interests is a condition which cannot be tolerated. Monopoly control seeks to protect vested interests and to perpetuate its grip on the advancement of science and technology. It retards the introduction of new goods and services and the maintenance of full employment in time of peace. Our experiences in this war have demonstrated conclusively that monopolistic control of critical sectors of industrial research has a paralyzing effect on mobilization of our national strength. One of the most difficult problems we have encountered in arming this country has been the domination and restriction of technology by small privileged groups. It has required strenuous efforts on the part of government and industry alike to overcome the stifling effects of complacent monopoly.

With rare exceptions industrial research at the present time can only be carried on by large numbers of scientists and technicians combining their ingenuity to resolve the complex problems of both pure and applied science. In the last fifty years technology has moved at such a rapid pace that no longer is the small businessman in a position to maintain laboratories of sufficient size. Today we witness the gigantic research organizations of all major corporations, and no one desires to impair their efficiency.

There is, nevertheless, a gap between the promise of organized research conducted on a huge scale by great corporations and the fulfillment as measured by accomplishments for the public interest. So that there shall be no misunderstanding, I should like to pay tribute to the vast army of scientists and research workers who have done such remarkable work in the years of peace as well as in the years of war in bringing forth a multitude of amazing discoveries. It is not their fault that their contributions have not been fully realized. The trouble is that in many instances the misuse of research by monopolistic and cartelized groups has resulted in the restricting of production, withholding new products, and fencing in and blocking off new developments.

One of the ablest and clearest statements of the effect of restrictive arrangements upon research was made by Dr. F. B. Jewett, vice-president of the American Telephone & Telegraph, and chief of Bell Laboratories. In discussing an agreement between his company and other parties, he stated:

"Broadly speaking, the practical effect of the agreement is to limit the field of possible development of each party to its present major activities. . . .

"Thus, while a casual reading of the agreement by one not thoroughly conversant with all the factors may appear to establish the basis for an enlarged free development in most of the fields, this is not actually the case.

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"The far-reaching effect of the proposed agreement on the character and scope of our research and development work is apparent. Viewed both from the standpoint of the research worker in our laboratories and from the standpoint of those responsible for the expenditures incurred by the Laboratories, the inevitable result would be a narrowing of the field of activity

and failure to undertake anything which at the outset is not clearly directed to the field of our current business. From the standpoint of the man who has a brilliant idea which in its first nebulous form seems to be applicable outside our business, there will be little or no urge to go ahead in the face of a situation where he knows that the results of his work have been sold in advance outside of the Bell System. From the standpoint of management there will likewise be no incentive, but quite the reverse, to urging him on and appropriating money for his investigations."

A member of a monopoly or cartel group all too often finds itself in a position where it must choose between the national interest on the one hand and its cartel obligations on the other. This difficulty is accurately stated in a document taken from the Standard Oil Co. (N. J.) files with reference to the development of 100 octane gasoline, one of the most vital materials of modern warfare:

"This possibility is, of course, extremely attractive to the Army Air Corps, but there is one difficulty involved which Mr. Russell quite frankly discussed. The hydrogenation development originated in Germany, and through cooperation all around has now passed into the hands of the oil industry of the entire world, and, to a certain extent, into the hands of the foreign chemical industry as well. There is a full and free exchange of technical information between all of the companies and units involved in the hydrogenation development and this exchange is not only by means of reports but by constant visits of technical men. To cut off these reports and shut our hydrogenation plants against these visitors would be not only a violation of these agreements, which would involve us in many difficulties, but would also be tantamount to a confession that we were engaged in some work of special military value which

would mean that the plants would become a focal point for espionage. The costs and difficulties of protecting against leakage of information about large commercial operations under such conditions is hard to estimate. *It seems that the only practical way to handle this problem is to avoid carrying out the operation of producing 100 octane number aviation gasoline commercially as long as possible.* We would, of course, also have to breach our agreements to render full and complete technical reports to all of the companies associated with us (even to the American companies, for fear of leakage). We should also forfeit the advantage in producing at the least cost the best available gasoline for commercial purposes.

"Any program by which the Army Air Corps can obtain their objective of a one or two year start over the rest of the world on this vital matter bristles with difficulties and sacrifices from our standpoint. We will not have to cross the bridge finally until our present experiments are completed. When and if we are able to demonstrate that the hydrogenation plants are capable of turning out an aviation product which with the usual quantity of lead can be brought up to 100 octane number, we shall be faced with the situation mentioned above. To meet the very proper desires of the Air Corps as expressed to us we shall have to violate our agreements and perhaps forfeit the confidence of our associates, both American and foreign, and beyond this we shall either have to avoid any commercial use of the new method or run the very grave risk of finding that our efforts at secrecy have been abortive."

In pointing out the inevitable conflicts between national loyalties and business interests which arise when industry is carried on through private international cartel agreements, I do not attack, nor do I intend to cast inferences against, the patriotic motives of any men or companies. I assume that the persons who

have taken part in these transactions have not consciously acted against the best interests of their country. But it is the cartel system that is at fault. The individuals caught up in the system are faced with a dilemma because it imposes on them choices which it is almost impossible to make without violation of an obligation to one of two conflicting interests.

One of the most serious limitations upon research has been the division of fields of technology by cartel groups. If a company is barred by agreement from an aspect of technology, there is little if any incentive to do research in that field. One possible consequence of such division of technology is that it permits foreign interests to exercise influence amounting to domination over research in this country.

No one doubts that synthetic rubber is a matter of national interest. The cartel arrangement between Standard Oil Co. (N. J.) and I. G. Farbenindustrie was such that the latter dominated the development of synthetic rubber in this country as well as in Germany.

In the case of the Bausch & Lomb (Rochester)-Carl Zeiss (Jena, Germany) cartel on military optical glass, the heads of the Bausch & Lomb department responsible for military research were to be appointed only with the agreement of the Zeiss firm.

In regard to the cartel involving Plexiglass, probably one of the most important plastics, and one which has innumerable military uses, the Rohm & Haas Company (Philadelphia) stated: "We could think of a price agreement on the finished product, or a division of our interests . . . we have not only our own interests at stake, but also the ones of our German house [Rohm & Haas of Darmstadt, Germany] and the I. G."

In December 1934 a high official of the duPont Company wrote to E. W. Webb, president of the Ethyl Gasoline Corpora-

tion (copies were sent to every member of its Board of Directors) as follows:

"I learned through our Organic Chemicals Division today that the Ethyl Gasoline Corporation has in mind forming a German company with the I. G. to manufacture Ethyl lead in that country.

"I have just had two weeks in Washington, no inconsiderable part of which was devoted to criticising the interchanging with foreign companies of chemical knowledge which might have a military value. Such giving of information by an industrial company might have the gravest repercussions on it. The Ethyl Gasoline Corporation would be no exception, in fact, would probably be singled out for special attack because of the ownership of its stock.

"It would seem, on the face of it, that the quantity of Ethyl lead used for commercial purposes in Germany would be too small to go after. It has been claimed that Germany is secretly arming. Ethyl lead would doubtless be a valuable aid to military aeroplanes.

"I am writing you this to say that in my opinion under no conditions should you or the Board of Directors of the Ethyl Gasoline Corporation disclose any secrets or 'know how' in connection with the manufacture of tetra-ethyl lead to Germany."

Yet, in the face of this warning from duPont, on January 12, 1935, Webb wrote the Chief of the Army Air Corps that "There is no technical data of military importance known to us which would be involved in the building of such a plant that has not already received wide publicity, or is of common knowledge in the aviation field."

This statement strikingly ignores the warning received from duPont only one month earlier that such a disclosure would

"doubtless" be prejudicial to our national security. In this connection it should not be overlooked that duPont and Dow were the sole producers of the chemical components of tetraethyl lead and, as such, were the concerns which alone possessed the essential know-how.

Why did Ethyl Gasoline disregard duPont's warning? Webb himself has supplied the answer in the final paragraph of his letter of January 12, 1935:

"There is, furthermore, an equally, if not more, important business aspect to the German situation. We are owned by Standard Oil and General Motors in equal shares. General Motors has important investments in Germany, producing there in excess of 50 percent of the motor cars. Standard Oil has large investments in all phases of the petroleum business in Germany. . . . We feel . . . for the reasons specifically mentioned here, that it would be extremely unfortunate for all concerned if we do not proceed to carry out the agreement with I. G. . . . A refusal or undue delay on our part . . . might bring on some serious reprisal measures."

This leaves nothing for surmise. It is not unfair to conclude, in view of these facts, that for the directors of Ethyl Gasoline the preservation of I. G. good-will conflicted with the maintenance of good faith in dealings with their own government. Though duPont, from the beginning, was opposed to the entire deal on grounds of patriotic scruples, nevertheless it eventually deferred. In an inter-office memo of the duPont Company appears the following:

"I think we should tell I.C.I. that the technical and engineering information which we are giving I. G. in connection with Tetraethyl Lead is being given them entirely at the request of the Ethyl Gasoline Corporation. As they no doubt know, Ethyl Gas and I. G. set up some arrangements whereby they

are going to participate jointly in the manufacture and sale of Ethyl Lead in Germany and we are turning over our information to Ethyl Gas which they in turn can submit to I. G. as part of the bargain in connection with this joint enterprise."

The full extent of the dilemma in which cartel members are placed by the conflict of their cartel commitments with national interest is indicated in two statements made by a representative of one of the world's great industrial combines. In a letter written in 1939, after the outbreak of war, a Standard Oil official stated:

"Pursuant to these arrangements I was able to keep my appointments in Holland, where I had three days of discussion with the representatives of the I. G. They delivered to me assignments of some 2,000 foreign patents and *we did our best to work out complete plans for a modus vivendi which would operate through the term of the war, whether or not the U. S. came in.* All of the arrangements could not be completed, but it is hoped that enough has been done to permit closing the most important uncompleted points by cable. It is difficult to visualize as yet just how successful we shall be in maintaining our relations through this period without personal contacts."

It is of significance also that this same representative of a cartel group brilliantly expressed the cartel point of view when he said:

"Upon completion of that agreement, the war intervened because our grouping of interested parties included Americans, British, Dutch, Germans, and the war introduced quite a number of complications. *How we are going to make these belligerent parties lie down in the same bed isn't quite clear as yet.* We are now addressing ourselves to that phase of the problem and I hope we will find some solution. *Technology has to carry on*

*—war or no war—*so we must find some solution to these last problems.”

It is in their very nature that cartels restrict the fullest developments of new products and that they attempt to place rigid handicaps on output. Very often they even adulterate the quality of products in order to exact the greatest possible toll from the public. Several examples may be used to indicate the practices and mental attitude of monopoly groups in relation to the quality of material. The following quotation concerning flashlight bulbs speaks for itself:

“Two or three years ago we proposed a reduction in the life of flashlight lamps from the old basis on which one lamp was supposed to outlast three batteries, to a point where the life of the lamp and the life of the battery under service conditions would be approximately equal. Sometime ago, the battery manufacturers went part way with us on this and accepted lamps of two battery lives instead of three. This has worked out very satisfactorily.

“We have been continuing our studies and efforts to bring about the use of one battery life lamps. I think you will be interested in the attached analysis which Messrs. Prideaux and Egeler have worked up covering the various points involved in going to the one battery life basis. If this were done, we estimate that it would result in increasing our flashlight business approximately 60 per cent. We can see no logical reason either from our standpoint or that of the battery manufacturer why such a change should not be made at this time.

“Messrs. Parker and Johnson now have this matter up with the battery manufacturers and I would urge that every assistance be given them to put it over.”

Methyl methacrylate, the name of one of the best known plastics, is used not only in the industrial field to make airplane

windshielding and many other structural materials, but it also has excellent qualities for the making of dental plates or dentures. As a result of the monopoly control of this material by the duPont Company and Rohm & Haas, its uses were divided into two fields: industrial and dental. At the time these firms were indicted a sharp difference in price was maintained. When methyl methacrylate was sold for industrial purposes, it cost 85 cents a pound, while the price to dental users was \$45 a pound. The dental profession soon learned that there was no difference in the material, whether it was designed for industrial or dental use. As a result they began to purchase their requirements from industrial users, in order to gain the advantage of the cheaper industrial price which, we could assume, might possibly be passed on to the dental patient.

The monopoly clique considered this a form of bootlegging. On March 15, 1940, the Vernon-Benshoff Company (Pittsburgh), a member of the clique, made various suggestions to the Rohm and Haas Company which, although they were not placed in actual effect, offer valuable insight into the shocking extremes to which monopolists will consider going:

"Our discussion of the Pure Food and Drug Law and pulling the acrylic denture under it leads me to wonder if the manufacturers of the commercial molding powders might not add an ingredient which would not effect the molding properties, but which would disqualify it under the act. Apparently a slight trace would suffice. Naturally it would be omitted from the strictly denture powder.

"Recently I asked Dr. Johnson to suggest an addition which might interfere with distillation of monomer or retard polymerization. He could not think of anything that wouldn't spoil the molding properties or clarity of the powders. But there the quantity needed to accomplish the result was the handicap.

"Under the very finicky regulations of the above act however, it may be the slightest trace of the right agent, too little to constitute harm to molding (or health either as a matter of fact) would suffice to have bootleg products in bad.

"A millionth of one per cent of arsenic or lead might cause them to confiscate every bootleg unit in the country. There ought to be a trace of something that would make them rear up."

In its reply the Rohm & Haas Company said that it was in agreement with the general principles presented in the letter quoted above and that it would ask its research department to work on the matter. This was expressed in a letter of March 21, 1940 to the Vernon-Benshoff firm:

"With reference to your letter of March 15th, we shall be glad to investigate whether denture materials come under the Pure Food and Drug Act. We agree with you that if we could put some ingredient in our commercial molding material which would disqualify it under the Pure Food and Drug Act, this would be a very fine method of controlling the bootleg situation. We shall take this matter up with our development department and advise you whether any such material could be used."

A striking way in which research can be perverted is illustrated by another example. The dyestuffs industry is one which is basically monopolistic and cartelized. A tight grip is maintained over its price structure. This is especially true of dyestuffs for textiles. Recently the duPont Company's research laboratories developed a pigment which can be utilized either in paints or as a dye for textiles. The duPont research laboratories considered various ways to be sure that the pigment could be limited in use to the paint and finishing field so as not to disturb the price structure of the textile dyestuffs field. The

trend of duPont's research thought on this subject was stated by the director of one of its laboratories:

"Further work may be necessary on adding contaminants to 'Monastral' colors to make them unsatisfactory on textiles but satisfactory for paints."

After working on this problem for some time, duPont's Jackson Laboratory reported on its progress somewhat dolefully. (DuPont says of Jackson Laboratory that it is "one of the largest organic chemical research laboratories in the world.") The particular task involved was difficult, according to a report by the Jackson Laboratory dated June 26, 1940:

"Mr. Chantler was of the opinion that pigment mixtures, unsuitable for textile printing would be very difficult to obtain.

"(B) *Agents Injurious to Textile Printing*.—The suggestion was made that certain compounds that were white under ordinary conditions but that would be oxidized to give colored bodies when the prints are subjected to chlorine bleach, could be used. A few experiments had been made along this line using such compounds as Chlorostain N, dianisidine and DuPont Oxy Black Base. Complete data on this work are not available. Mr. Dahlen expressed the opinion that the addition of such compounds probably would cause as much or more damage to the paint trade as to textile printing.

"Such substances as ground glass and carborundum were suggested for incorporation with the pigment. While these materials would undoubtedly scratch printing rolls, there is considerable doubt as to their effect in paints and lacquers."

Two days later the problem was again attacked at a meeting between the representatives of General Aniline Works and the duPont Company. Eight possible methods of adulteration were considered. I quote a few from the confidential memorandum of their discussion:

"1. A new type of copper phthalocyanine (CPC) for the paint and lacquer trade which would be unsuitable for application textiles.

.....

"The importance of solving these problems was recognized, and it was agreed that both parties would work on promising ideas which resulted from this discussion. The three problems are closely related, and it is possible that the solution of one or two will automatically solve the third. It was agreed that a powder would be the preferable standard. After detailed discussion of various modes of attack, the following appeared to be outstanding:

"1. (a) Mixtures of CPC with Lakes.—The most promising mode of attack appears to lie in the formulation of a mixture of CPC with a lake, especially a lake of CPC. Such a mixture should have fairly good fastness to light and *yet be poor in wash fastness on textiles* or incompatible with the usual textile printing lacquers . . .

.....

"(d) Deteriorate Cotton.—Compounds might be incorporated into CPC which when applied to textiles and followed by bleaching or heating treatment *might increase the deterioration of the cloth*. Compounds such as chlorates or aliphatic halides which would produce hydrochloric acid were specific examples.

.....

"(g) Irritating Substances.—*It is known that certain resins and solvents are irritating to the skin, often causing dermatitis. It might be possible to formulate a CPC composition which will make textile materials irritating to the skin.*

"(h) Incorporation of Grit.—It seemed too dangerous to attempt to add gritty material to CPC since, although it would

interfere with the use of the material for textiles, it would also offer serious disadvantages in grinding on application of surface coatings.

"It was agreed that the mere dulling of the material would not be a satisfactory solution since dull shades are often used in the textile trade. Most of the above comments are often based on work on blue, and many of the solutions would apply equally well to the green. In fact it is believed that there is a larger market for the sale of green than the blue."

It seems to me that we cannot afford to place our sole reliance upon monopolistic corporations whose interests have only too often been divided, who have sought restricted production rather than full employment of our resources and labor, and who have sought for monopoly control rather than public welfare. We must learn by the bitter lessons of the early years of this war which found us lacking both materials and the know-how to make them, resulting from the restrictive practices of monopolies which instinctively seek to produce as little as possible for the greatest profit.

In war and peace alike technology is a vital factor in our national life. The present war is being waged with weapons and equipment which represent the last word in scientific development. Careful planning and rigorous adherence to the plans enabled Germany to have, in 1939, the most efficient war machine the world had ever seen. Now, after several years of feverish activity, the United Nations have at last caught up with and passed Germany in the race for armament superiority.

Now that our war effort has finally been put in high gear an entirely different kind of problem seems to be emerging. Under the forced draft of war urgency and unlimited government expenditure, materials and products are being made the like of which we have not heretofore known. The light metals, alumi-

num and magnesium, the wonder metal beryllium, the miraculously efficient diamond tools and the tungsten carbide tools, the plastics and dozens of other new developments will unquestionably make the postwar world something entirely different from that to which we have been accustomed. Many of the processes which can revolutionize our mode of living are owned by the government. Some are in the custody of the Alien Property Custodian. Others have been developed with federal funds, either by government agencies or by private concerns. No one will seriously dispute the wisdom of retaining control of these government-owned processes and of fostering the fullest possible use of them for the benefit of all.

There can be no denying that the war has resulted in a concentration of productive facilities in the hands of a relatively small number of gigantic corporations. Even before Pearl Harbor some of them were enormous concerns capable of wielding irresistible power in the competitive struggle with other, smaller companies. Today and after the war the smaller competitors which have survived will find the odds against them a great deal more disheartening than before. It is not in the public interest to allow the small competitors to be killed off in the uneven fight. Neither is it in the public interest to place hampering restrictions upon the effects of the large companies to fully utilize their research laboratories and technical experience for the purpose of strengthening their competitive position.

Without doubt the sensible thing for us to do is to make research and technology available to the little fellow as well as to his big competitor. In agriculture this policy has amply demonstrated its soundness. Experiment stations financed by state and federal funds extend the benefits of their research to the small farmer as well as to the large. It is doubtful that one could find a single intelligent farm operator, large or small, who

would voice the opinion that governmentally financed agricultural research has not been worth many times the money spent for it. The small industrialist has the same right to expect that a government wishing him to continue to make his contribution to the national welfare shall offer him those benefits of research and expert advice which he cannot afford to provide for himself but which can easily be provided by the government.

There are those who scoff at all mention of cartels and refer to them as bogies conjured up to justify an attack on all big business. Such an attitude is dangerous. Cartels present the greatest challenge to our system of free enterprise.

In every cartel arrangement which has come to the attention of the Antitrust Division of the Department of Justice technology has been a vital factor. It is the responsibility of government to see that technology remains free from artificial control and monopoly perversion.

Every instance of this sort is evidence of the possibility of service to the public which might be expected if the government should see fit to provide itself with an adequately financed and numerically sufficient staff of technologists. It is my belief that the time has arrived for the adoption of legislation which will adequately protect and advance the public interest in technological development.

4

Patents

The importance and the position of patents in the American economy have been sharply defined since the outbreak of the present war. While the problem which patents have presented to our economy did not begin with the attack on Pearl Harbor, our experience within the past few years has crystallized many of the questions and issues at stake.

Patents are fundamental factors in the cartel problem because patent agreements are quite frequently used as the basis of cartel arrangements. The vital importance of control over technology and research to the achievement of cartel power enhances the significance of patents as the foundation stones of cartel structures. At the same time, the effects of patent abuses upon the economy are magnified to a critical degree.

We are all familiar with the historical background of the patent system and with the intent of the authors of the Constitution in stating that Congress shall have the power to promote the progress of science and useful arts by the grant of a patent. It is no accident that the original clause in the Constitution was phrased in careful terms. The framers of the Constitution inherited a concern toward the grant of any monopoly by govern-

ment. They were specific in limiting the scope of the patent monopoly because they did not wish the patent to become the basis of a system of privilege.

When the American patent system was born, we were a frontier nation. Pioneers in every branch of science had before them an inviting horizon of discovery. The recognition of their contribution towards the promotion of science and useful arts served as a stimulus to their initiative and ingenuity. During this period the patent system served our country well and acted as a major incentive in the making of industrial America.

Our patent system was designed to "promote the progress of science and useful arts." In many respects it has done so, and has given proper protection to inventors and enterprising businessmen. Where it operates to carry out this purpose, there can be no just complaint. But in many instances the patent system has been perverted to accomplish exactly the opposite effect. The patent has become the principal power weapon of modern monopoly, and the misuse of patents the major tactic of industrial cartels. This perversion has become so widespread as to jeopardize the whole patent system.

The patent problem as it exists today arises in an environment vastly different from the handicraft era in which modern industry found its beginnings. It is not the patent grant as such nor is it the operation of the individual inventor that brings the patent system into question. Invention today is a large-scale industry in a complex economy. In many branches of industrial production vast monopolies exercise a dominating influence over research. It is the abuse and misuse of patents by such concentrated groups wielding tremendous economic power which have brought patents into conflict with the fundamental purpose of the patent law and with the Sherman Act.

Monopoly interests, which have violated the antitrust laws in

the course of their abuse of patents, have made the claim that the Antitrust Division of the Department of Justice is endangering the patent system by prosecuting restraints of trade based on patents. Many honest and innocent bystanders have been confused and misled by this propaganda. The fact of the matter is that danger to the patent system arises not from enforcement of the antitrust laws but from the flagrant abuses of those who use patents as the foundation stone of illegal monopolistic control of industry. If the patent system is finally wrecked we shall have to thank those who brought it into disrepute by their unflagging attempts to use the patent grant in a manner contrary both to the law and to the national interest.

Because patents have become an instrument of power-hungry and power-seeking groups in industry, grave doubt now exists as to whether our economy can longer tolerate and permit the control and consolidation of patents by industrial oligarchies.

Among the many serious abuses to which patents have become subject within the last few decades, it is necessary only to specify a few.

1. Patents have been used illegally to establish regimented systems of industrial control by private groups.

2. Patents have been used, contrary to the tradition and intent of the American economy, to stifle new enterprise, to limit capacity and production, to divide world markets, to impose artificial and arbitrary price levels, and to set up private tariff walls.

3. In their determination to eliminate competition among themselves and to prevent the emergence of new enterprise, monopoly groups in industry have used patents as a shield for conspiracy to violate the antitrust laws.

4. Employing the instruments of law designed to secure justice and protection to the small inventor and small business-

man, monopoly interests have used litigation and threats of litigation based on patents to compel the submission or surrender of independent enterprise to the dictates of monopoly control.

5. Patents have been used by industrial giants here and abroad to fasten their grip on international trade by setting up patent cartel agreements which slice world markets into exclusive trade areas. In many instances these international patent cartels have made it plain that they consider adherence to monopoly rules to be above and beyond the laws of the United States and other countries.

6. Our experiences in the first World War and the present global war have demonstrated conclusively that the interests of hostile countries have been able to use patents as weapons in economic warfare against the United States. By delaying the development of strategic new industries, by withholding know-how, and by strangling the market with exorbitant prices for critical materials, monopoly groups in aggressor nations have sought to weaken the war potential of the American economy.

7. In numerous instances, scientific research has been perverted and misused in order to strengthen monopoly restrictions illegally based on patents.

In the scores of Department of Justice cases involving patents and illegal agreements based on patents and in the testimony before various congressional committees investigating the facts